

#3

GTSYS.004A

PATENT

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Applicant	:	Felgner et al.	)	Group Art Unit Unknown
App. No.	:	09/738,046	)	
Filed	:	December 15, 2000	)	
For	:	INTRACELLULAR PROTEIN DELIVERY COMPOSITIONS AND METHODS OF USE	)	
Examiner	:	Unknown	)	



INFORMATION DISCLOSURE STATEMENT

Assistant Commissioner for Patents  
Washington, D.C. 20231

Dear Sir:

Enclosed is form PTO-1449 listing references that are also enclosed. This Information Disclosure Statement is being filed before the receipt of a first Office Action on the merits, and presumably no fee is required in accordance with 37 C.F.R. § 1.97(b)(3). If a first Office Action on the merits was mailed before the mailing date of this Statement, the Commissioner is authorized to charge the fee set forth in 37 C.F.R. § 1.17(p) to Deposit Account No. 11-1410. A duplicate copy of this Statement is enclosed for that purpose.

Respectfully submitted,

KNOBBE, MARTENS, OLSON & BEAR, LLP

Dated: 4-16-01

By: [Signature]

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Registration No. 29,655  
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Newport Beach, CA 92660  
(619) 235-8550

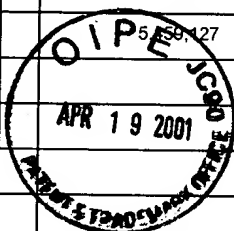
Attach to paper no.3

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SHEET 1 OF 6

FORM PTO-1449 U.S. DEPARTMENT OF COMMERCE PATENT AND TRADEMARK OFFICE  <b>INFORMATION DISCLOSURE STATEMENT          BY APPLICANT</b>  (USE SEVERAL SHEETS IF NECESSARY)	ATTY. DOCKET NO. GTSYS.004A	APPLICATION NO. 09/738,046
	APPLICANT Felgner et al.	
	FILING DATE December 15, 2000	GROUP Unknown

U.S. PATENT DOCUMENTS							
EXAMINER INITIAL		DOCUMENT NUMBER	DATE	NAME	CLASS	SUBCLASS	FILING DATE (IF APPROPRIATE)
		4,160,452	07/10/79	Theeuwes	128	260	
		4,256,108	03/17/81	Theeuwes	128	260	
		4,265,874	05/05/81	Bonsen et al.	424	15	
		4,897,355	01/30/90	Eppstein et a.	435	240.2	
		5,264,618	11/23/93	Felgner et al.	560	224	
		5,459,127	10/17/95	Felgner et al.	514	7	



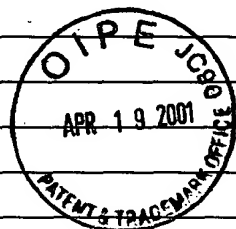
FOREIGN PATENT DOCUMENTS								
EXAMINER INITIAL		DOCUMENT NUMBER	DATE	COUNTRY	CLASS	SUBCLASS	TRANSLATION	
							YES	NO
		WO 98/19503	05/07/98	PCT WIPO				

EXAMINER INITIAL	OTHER DOCUMENTS (INCLUDING AUTHOR, TITLE, DATE, PERTINENT PAGES, ETC.)	
	1.	Bukanov, et al., <u>PD-loop: A complex of duplex DNA with an oligonucleotide</u> ; <i>Proc. Natl. Acad. Sci. USA</i> 95:5516-5520 (1998)
	2.	Cherny, et al., <u>DNA unwinding upon strand-displacement binding of a thymine-substituted polyamine to double-stranded DNA</u> ; <i>Proc. Natl. Acad. Sci. USA</i> 90:1667-1670 (1993)
	3.	Du, et al., <u>Conformational and topological requirements of cell-permeable peptide function</u> ; <i>J. Peptide Res.</i> 51:235-243 (1998)
	4.	Egholm, et al., <u>Efficient pH-independent sequence-specific DNA binding by pseudoisocytosine-containing bis-PNA</u> ; <i>Nucl. Acids Res.</i> 23(2):217-222 (1995)
	5.	Felgner, et al., <u>Enhanced Gene Delivery and Mechanism Studies with a Novel Series of Cationic Lipid Formulations</u> ; <i>J. Biol. Chem.</i> 269(4):2550-2561 (1994)

EXAMINER	DATE CONSIDERED
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	6.	Felgner, et al., <u>Lipofection: A highly efficient, lipid-mediated DNA-transfection procedure</u> ; <i>Proc. Natl. Acad. Sci. USA</i> 84:7413-7417 (1987)
	7.	Felgner, et al., <u>Editorial - Nomenclature for Synthetic Gene Delivery Systems</u> ; <i>Hum. Gene Ther.</i> 8:511-512 (1997)
	8.	Glennie and Johnson, <u>Clinical trials of antibody therapy</u> ; <i>Immunol. Today</i> 21:403-410 (2000)
	9.	Gregoriadis, et al., <u>Liposome-mediated DNA vaccination</u> ; <i>FEBS Lett.</i> 402:107-110 (1997)
	10.	Gregoriadis, et al., <u>Vaccine Entrapment in Liposomes</u> ; <i>Methods</i> 19:156-162 (1999)

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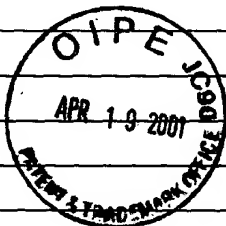
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	11.	Hong, et al.; <u>Stabilization of cationic liposome-plasmid DNA complexes by polyamines and poly(ethylene glycol)-phospholipid conjugates for efficient in vivo gene delivery</u> ; <i>FEBS Lett.</i> 400:233-237 (1997)
	12.	Leserman and Barbet, <u>Targeting to cells of fluorescent liposomes covalently coupled with monoclonal antibody or protein A</u> ; <i>Nature</i> 288:602-604 (1980)
	13.	Liu, et al., <u>Factors influencing the efficiency of cationic liposome-mediated intravenous gene delivery</u> ; <i>Nature Biotech.</i> 15:167-173 (1997)
	14.	Mhashilkar, et al., <u>Inhibition of HIV-1 Tat-mediated LTR transactivation and HIV-1 infection by anti-Tat single chain intrabodies</u> ; <i>EMBO J.</i> 14:1542-1551 (1995)
	15.	Mhashilkar, et al., <u>Inhibition of Human Immunodeficiency Virus Type 1 Replication <i>In Vitro</i> in Acutely and Persistently Infected Human CD4 Mononuclear Cells Expressing Murine and Humanized Anti-Human Immunodeficiency Virus...</u> ; <i>Hum. Gene Ther.</i> 10:1453-1467 (1999)

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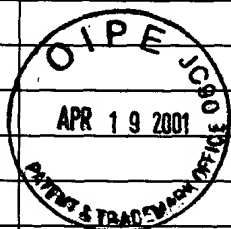
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	16.	Mhashikar, et al., <u>Inhibition of Human Immunodeficiency Virus Type 1 Replication in vitro by a Novel Combination of Anti-Tat single-Chain Intrabodies and NF-KB Antagonists</u> ; <i>J. Virol.</i> 71:6486-6494 (1997)
	17.	Reichert, <u>New biopharmaceuticals in the USA: trends in development and marketing approvals 1955-1999</u> ; <i>Trends Biotechnol.</i> 16:370-375 (1998)
	18.	Rojas, et al., <u>Controlling Epidermal Growth Factor (EGF)-stimulated Ras Activation in Intact Cells by a Cell-permeable peptide Mimicking Phosphorylated EGF Receptor</u> ; <i>J. Biol. Chem.</i> 271:27456-27461 (1996)
	19.	Rojas, et al., <u>Genetic engineering of proteins with cell membrane permeability</u> ; <i>Nature Biotechnol.</i> 16:370-375 (1998)
	20.	Schwarze, et al., <u>In Vivo Protein Transduction: Delivery of a Biologically Active Protein Into the Mouse</u> ; <i>Science</i> 285:1569-1572 (1999)

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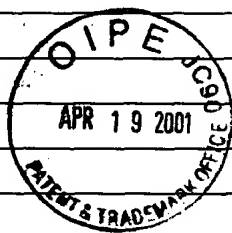
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	21.	Schwarze, et al., <u>Protein transduction: unrestricted delivery into all cells?</u> ; <i>Trends Cell Biol.</i> 10:290-295 (2000)
	22.	Tseng, et al., <u>Transfection by Cationic Liposomes Using Simultaneous Single Cell Measurements of Plasmid Delivery and Transgene Expression</u> ; <i>J. Biol. Chem.</i> 272:25641-25647 (1997)
	23.	Zelphati, et al., <u>Gene Chemistry: Functionally and Conformationally Intact Fluorescent Plasmid DNA</u> ; <i>Hum. Gene Ther.</i> 10:15-24 (1999)
	24.	Zelphati, et al., <u>Intracellular Distribution and Mechanism of Delivery of Oligonucleotides Mediated by Cationic Lipids</u> ; <i>Pharm. Res.</i> 13:1367-1372 (1996)
	25.	Zelphati, et al., <u>Mechanism of oligonucleotide release from cationic liposomes</u> ; <i>Proc. Natl. Acad. Sci. USA</i> 93:11493-11498 (1996)

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	26.	Zelphati, et al., <b>PNA-Dependent Gene Chemistry: Stable Coupling of Peptides and Oligonucleotides to Plasmid DNA</b> ; <i>BioTechniques</i> 28:304-310 (2000)

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